

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-4. (Cancelled)

5. (Currently Amended) A liquid crystal display, comprising:

a back light unit having a lamp housing having a first side and a second side opposite the first side, a plurality of lamps respectively having a low voltage electrode and a high voltage electrode each at opposite ends of the lamp and arranged substantially parallel in the lamp housing; and

a liquid crystal panel disposed on the back light unit and having a plurality of liquid crystal cells arranged in a matrix form,

wherein the plurality of low voltage electrodes of odd-numbered lamps are disposed at the first side and the plurality of high voltage electrodes of odd-numbered lamps are disposed at the second side,

wherein the plurality of high voltage electrodes of even-numbered lamps are disposed at the first side and the plurality of low voltage electrodes of even-numbered lamps are disposed at the second side,

wherein an inner wall of each lamp is coated with a BAM type phosphor, and a thickness of the BAM type phosphor at the low voltage electrodes is different from that at the high voltage electrodes,

wherein an AC voltage from an inverter is applied to the low and high voltage electrodes such that a high voltage noise at the high voltage electrodes is offset by the adjacent low voltage electrodes, and

wherein a difference of color sense ($\Delta uv = ((u_1 - u_2)^2 + (v_1 - v_2)^2)^{1/2}$) of the back light unit is below 0.004 in which $u = 4x / (3 + 12y - 2x)$, $v = (2/3) \times (9y) / (3 + 12y - 2x)$, x and y are color coordinates defined in CIE, u_1 is the maximum value of u, v_1 is the maximum value of v, u_2 is the minimum value of u, and v_2 is the minimum value of v.

~~wherein a low voltage of an AC voltage is applied to the plurality of low voltage electrodes of odd-numbered lamps at the first side and the plurality of low voltage electrodes of even-numbered lamps at the second side,~~

~~wherein a high voltage of the AC voltage is applied to the plurality of high voltage electrodes of even-numbered lamps at the first side and the plurality of high voltage electrodes of odd-numbered lamps at the second side,~~

~~wherein the AC voltage is applied in parallel to the odd-numbered lamps, and~~

~~wherein the AC voltage is applied in parallel to the even-numbered lamps.~~

6. (Previously Presented) The liquid crystal display according to claim 5, wherein the plurality of low voltage electrodes and the plurality of high voltage electrodes of the lamps are respectively located in a zigzag fashion

7. (Previously Presented) The liquid crystal display according to claim 5, wherein the plurality of low voltage electrodes and the plurality of high voltage electrodes of the lamps are alternately arranged by N-number (where N is a positive integer more than 2).

8. (Cancelled)

9. (Currently Amended) A liquid crystal display, comprising:

a back light unit having a lamp housing having a first side and a second side opposite the first side, a plurality of lamps respectively having a low voltage electrode and a high voltage electrode each at opposite ends of the lamp and arranged substantially parallel in the lamp housing; and

a liquid crystal panel disposed on the back light unit and having a plurality of liquid crystal cells arranged in a matrix form,

wherein the lamps are arranged in a plurality of groups, each group including N lamps directly next to one another (where N is a positive integer greater than 1),

wherein the plurality of low voltage electrodes of odd-numbered groups of lamps are disposed at the first side and the plurality of high voltage electrodes of odd-numbered groups of lamps are disposed at the second side,

wherein the plurality of high voltage electrodes of even-numbered groups of lamps are disposed at the first side and the plurality of low voltage electrodes of even-numbered groups of lamps are disposed at the second side,

wherein an inner wall of each lamp is coated with a BAM type phosphor, and a thickness of the BAM type phosphor at the low voltage electrodes is different from that at the high voltage electrodes,

wherein an AC voltage from an inverter is applied to the low and high voltage electrodes such that a high voltage noise at the high voltage electrodes is offset by the adjacent low voltage electrodes, and

wherein a difference of color sense ($\Delta uv = ((u_1 - u_2)^2 + (v_1 - v_2)^2)^{1/2}$) of the back light unit is below 0.004 in which $u = 4x / (3 + 12y - 2x)$, $v = (2/3) \times (9y) / (3 + 12y - 2x)$, x and y are color coordinates defined in CIE, u_1 is the maximum value of u, v_1 is the maximum value of v, u_2 is the minimum value of u, and v_2 is the minimum value of v.

~~wherein a low voltage of an AC voltage is applied to the plurality of low voltage electrodes of odd-numbered groups of lamps at the first side and the plurality of low voltage electrodes of even-numbered groups of lamps at the second side,~~

~~wherein a high voltage of the AC voltage is applied to the plurality of high voltage electrodes of even-numbered groups of lamps at the first side and the plurality of high voltage electrodes of odd-numbered groups of lamps at the second side,~~

~~wherein the AC voltage is applied in parallel to the odd-numbered groups of lamps, and~~

~~wherein the AC voltage is applied in parallel to the even-numbered groups of lamps.~~